Application No.: 09/803,653

Amendment Dated:

Reply to Advisory Action Dated: October 22, 2004

## REMARKS

Claims 1-17 stand cancelled. Claims 28-40 have been cancelled.

Claims 18 and 19 have been amended to refer to "treatment with" a pharmaceutical. Further, the claims have been amended to refer to a pharmaceutical that "activates G protein heterodimers containing a G protein subunit Gbeta3 or Gbeta3s." Support for the amendments can be found throughout the specification. For example, support for the definition "wherein the in vivo pharmaceutical is one which activates G protein heterodimers containing a G protein subunit Gbeta3 or Gbeta3s" can be found, at page 5, lines 8-15 of the specification. The claims are further amended to refer to a method of "detecting the genetic modification in the nucleic acid comprising SEQ ID NO:2." Support for the definition "by detecting the genetic modification in the nucleic acid comprising SEQ ID NO: 2" can be found, for example, at page 5, lines 3-7 of the specification. Claims have also been amended to state that thymidine at position 825 is indicative of altered responsiveness of the individual to the treatment with the in vivo pharmaceutical as compared to an individual who has cytosine in the same position. Support for the definition "and wherein the thymidine at position 825 of SEO ID NO: 2 is indicative of the individual having increased activation capacity of G proteins which is indicative of the altered responsiveness of the individual to the in vivo pharmaceutical" can be found for example at page 34, lines 16-18, and at page 35, lines 8-10 and lines 13-25 of the specification.

Claim 21 has been amended to include "the" before "pharmaceutical. This is a mere clerical amendment.

Claim 25 has been amended to delete the reference to polymorphisms at position 1429 and to add the definition "wherein the presence of thymidine is indicative of the individual havein intensified reduction of the cardiac output as a response to treatment with beta-adrenoreceptor blockers." Support for this amendment can be found, for example, at page 35, lines 12-25.

Claim 26 has been amendment to delete the reference to polymorphism at the position 1429 and to add a definition" wherein the presence of thymidine at position 825 of SEQ ID NO: 2 is indicative of the individual being less responsive to the substance having prostaglandin E1 action." Support for this amendment can be found, for example, at page 36, lines 10-11.

BOS429964.1

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The typographical error in claims 25 and 26 in the term "thymine" which obviously refers to "thymidine" has also been corrected. A skilled artisan knows that the letter "T" in the genetic code referred to throughout the specification refers to "thymidine" not "thymine". Specific support for referring to "T" is found, for example, at page 8, lines 25-28.

Therefore, applicants respectfully submit that the amendments are supported by the specification as filed and do not introduce new matter and their entry is respectfully requested.

Applicants further submit that these amendments respond to the examiner's concerns in the advisory action dated October 22, 2004.

In view of the foregoing amendment it is respectfully submitted that all claims are now in condition for allowance. Early and favorable action is requested.

If any additional fee is required with this submission, the Commissioner is hereby authorized to charge Nixon Peabody Deposit Account No. 50-0850.

Date: 12/1/04

Respectfully submitted,

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